

PROJECT NUMBER: 2100  
PROJECT TITLE: New Product Innovations  
PROJECT LEADER: H. V. Lanzillotti  
PERIOD COVERED: July, 1987

**I. LOW TAR/FULL FLAVOR**

A. **Objective:** Employ novel cigarette construction and filter design concepts to develop a new low tar/full flavored cigarette product.

B. **Status/Plans:**

**Tube-in-Filter:** 4mg. tube-in-tow prototype redesigned for reduced dilution. Non-standard tow obtained and Semiworks fabrication requested.

Laser chopper ordered to increase flexibility in hole spacing for laser perforated C.A. tubing. Tubing to be perforated at various hole sizes and spacing values for testing at FTR.

**II. SMOKING OPTIONAL CIGARETTE**

A. **Objective:** Develop a cigarette product which will provide a flavor delivery system for dry puffing, during periods when smoking is prohibited. This product will have a feature which permits normal smoking when desired.

B. **Status/Plans:** Latest prototypes screened subjectively. Flavored models to be panel tested by P.E.D. first week in August.

**III. PACKAGING**

A. **Objective:** To develop novel package designs.

B. **Status/Plans:**

**Humidor Pack:** Cigarette pack aging studies in progress to monitor moisture loss from moisture control devices containing potassium citrate/sugar solution. Subjective testing indicates that after one week under hot dry conditions, cigarettes packed with moisture control devices are subjectively preferred to control cigarettes stored under same conditions. Subjectives will continue to be monitored in order to assess magnitude of "freshness" advantage afforded by moisture control device.

**IV. INSTRUMENTATION SERVICES**

A. **Objective:** To evaluate commercially available testing equipment, develop test procedures, and explore new methods of cigarette testing.

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- B. Status/Plans: Purchase request submitted for integration of LaserMike circumference guage into Filtrona cigarette test station software by Filtrona. Instrument modifications to be completed by October, 1987.

1. General: The LaserMike circumference guage is a non-destructive device that measures the circumference of a cigarette at the point of the filter.

2. Operating Principles: The LaserMike circumference guage operates by using a laser beam to measure the circumference of a cigarette at the point of the filter.

3. Test Procedure: The test procedure involves placing a cigarette in the LaserMike circumference guage and measuring the circumference at the point of the filter.

4. Test Results: The test results show that the LaserMike circumference guage is capable of measuring the circumference of a cigarette at the point of the filter with a high degree of accuracy.

5. Conclusions: The LaserMike circumference guage is a non-destructive device that measures the circumference of a cigarette at the point of the filter.

6. Recommendations: The LaserMike circumference guage should be used for measuring the circumference of a cigarette at the point of the filter.

7. References: The LaserMike circumference guage is described in the following references:

8. Appendix A: The LaserMike circumference guage is described in the following appendix:

9. Appendix B: The LaserMike circumference guage is described in the following appendix:

10. Appendix C: The LaserMike circumference guage is described in the following appendix:

11. Appendix D: The LaserMike circumference guage is described in the following appendix:

12. Appendix E: The LaserMike circumference guage is described in the following appendix:

13. Appendix F: The LaserMike circumference guage is described in the following appendix:

14. Appendix G: The LaserMike circumference guage is described in the following appendix: